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Fukushima-Effects on German Media Coverage and Attitudes

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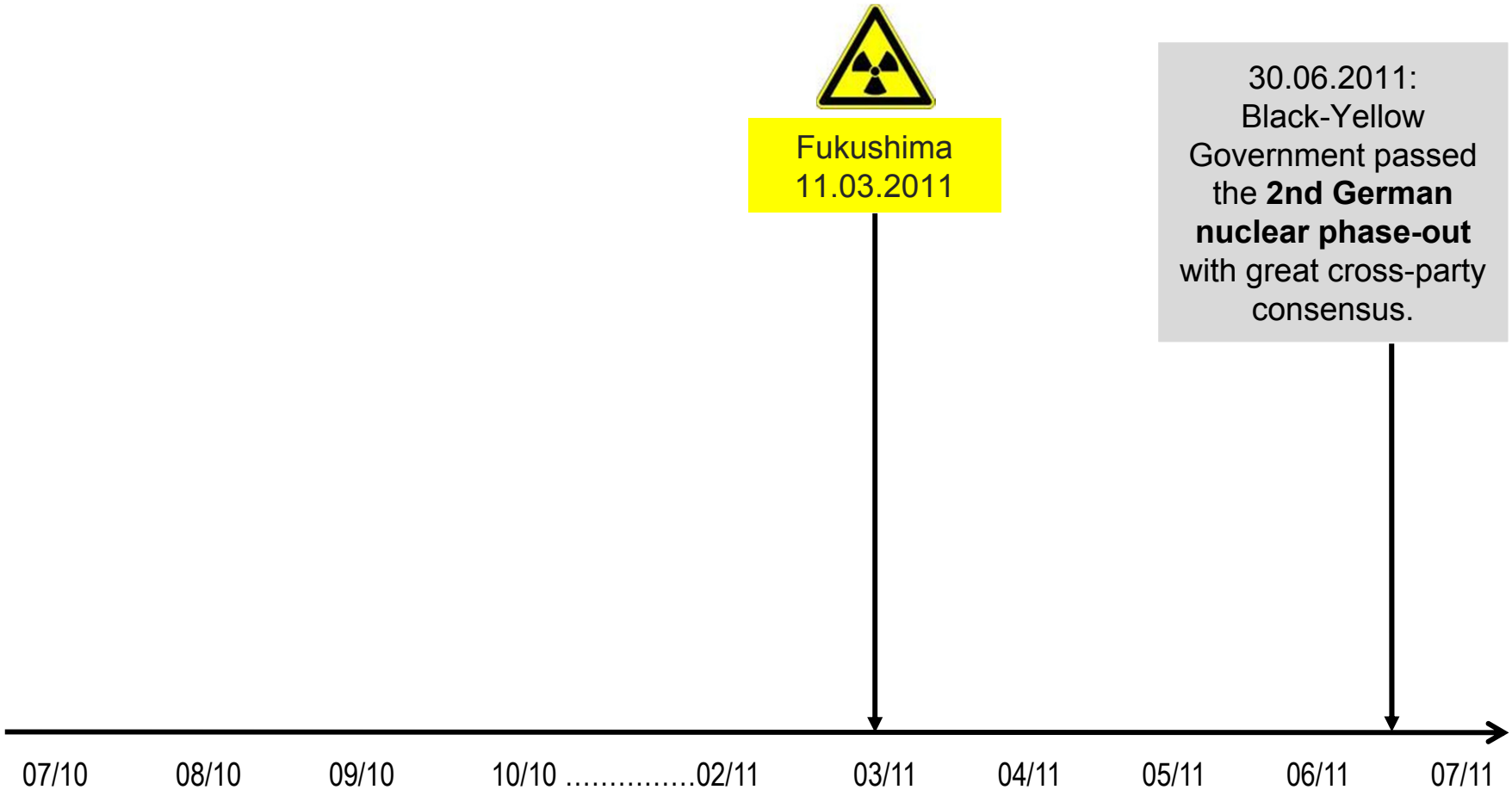
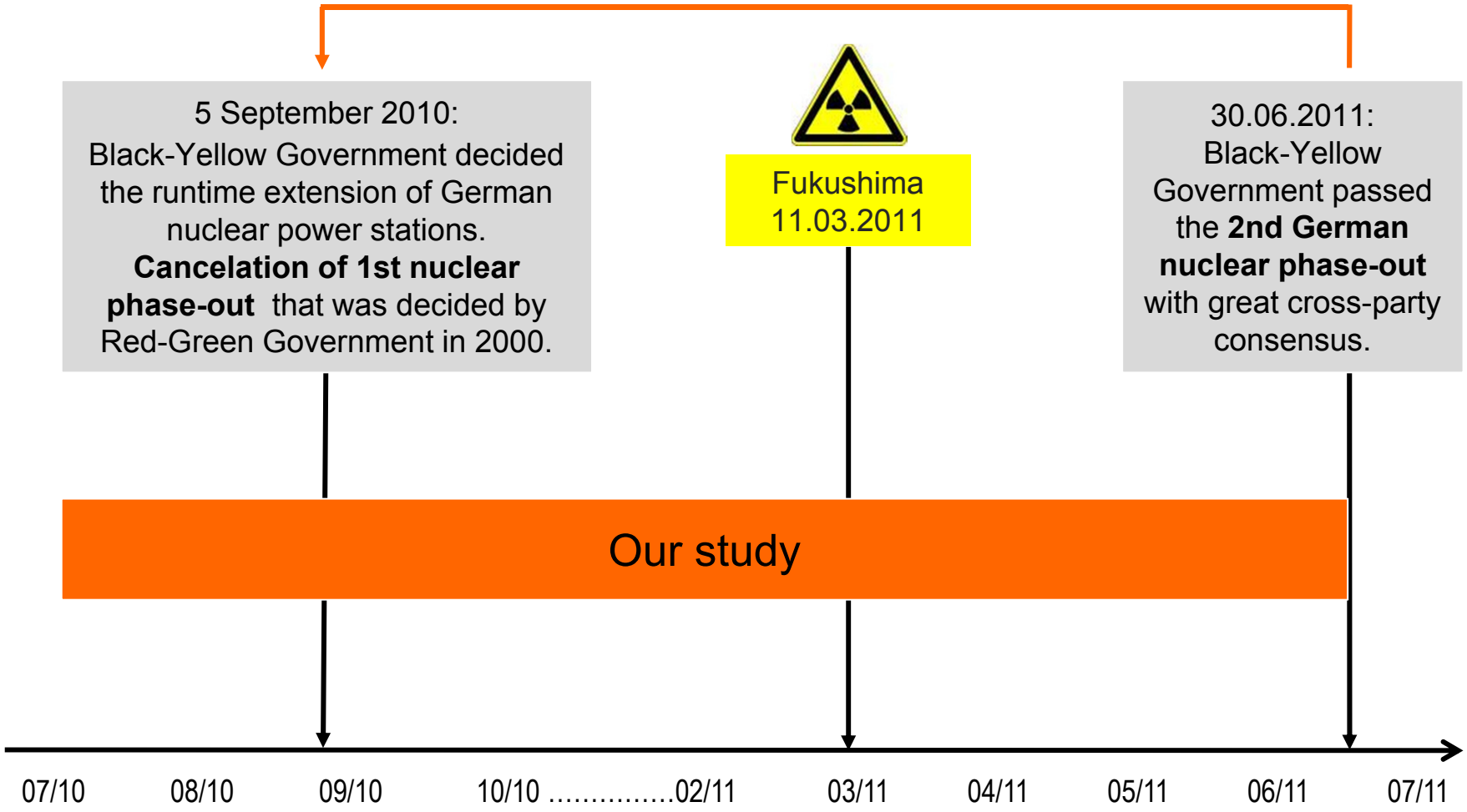
23 May 2014, ICA Seattle

Political Context in Germany



Political Context in Germany



Changes through Fukushima

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Changes in the media:

(1) Do we find changes in the thematic framing of nuclear power in the German media coverage?

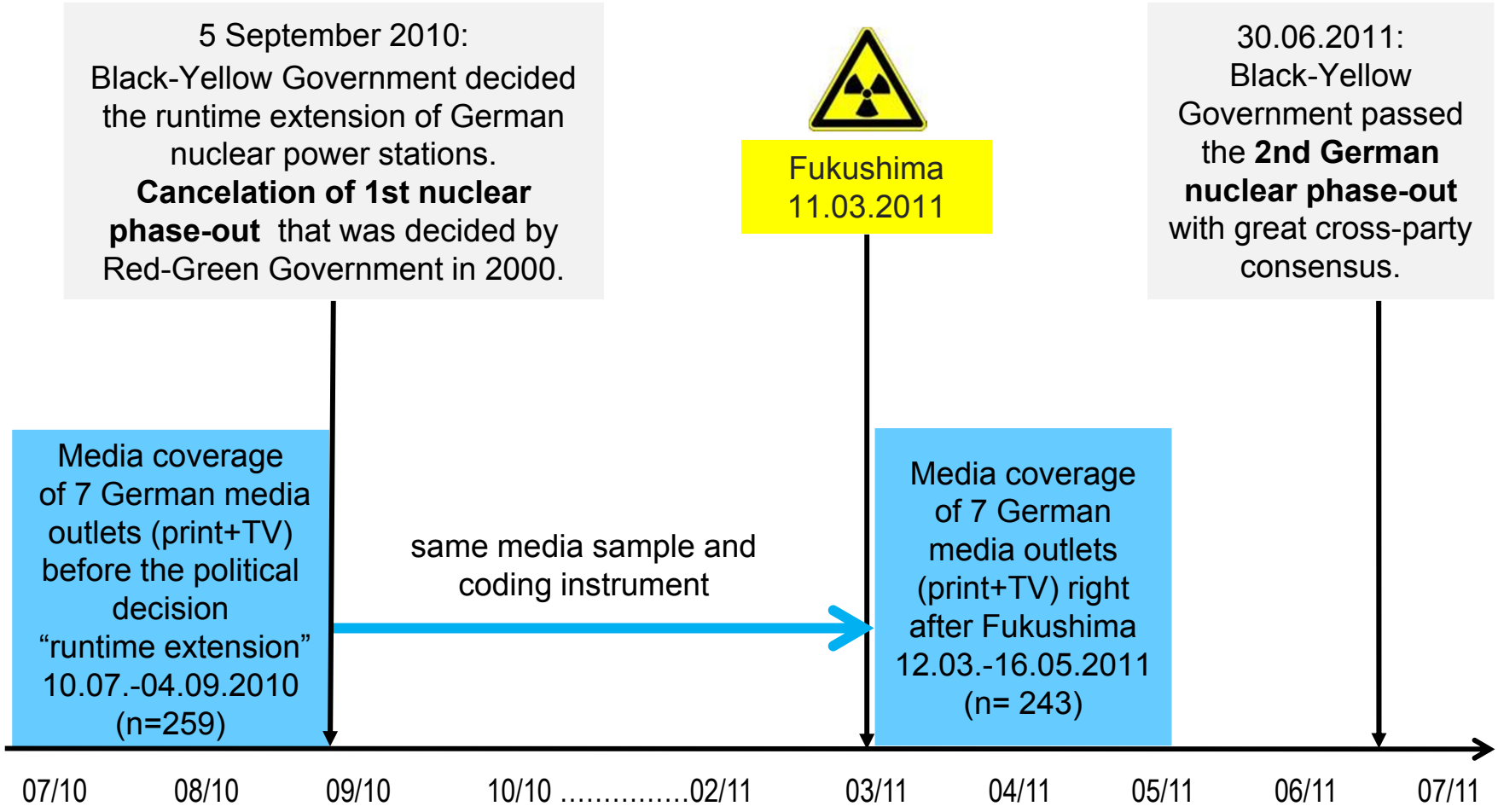
(2) Do we find changes in the positioning of (political) actors towards nuclear power in the German media coverage?

Changes in the public opinion:

(3) Do we find changes in the attitudes towards nuclear power of the German public?

(4) And what factors can explain these attitude changes?

Analysis of changes in the media



Quantitative Content Analysis

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	2010	2011
Population:	Media coverage on nuclear power in Germany 8 weeks before the political decision „runtime extension“	Media coverage about nuclear power in Germany 8 weeks after Fukushima
Study period	10.07.2010 - 04.09.2010	12.03.2011 - 16.05.2011
Sampling	No random sampling : all articles and news items	Random sampling : articles and news items of 3 days/per week
Media sample	2 national quality newspapers papers, 2 local daily newspapers, 2 public and 1 private newscast	
n	259 articles and news items	243 articles and news items
Coding instrument	Standardized set of categories on two levels of coding 1) 8 categories on article level to code the thematic references: economy, energy supply, renewable energies, risk/safety, environmental pollution, climate compatibility, judicial competence, protest 2) 3 categories on statement level to code evaluative statements on nuclear power of stakeholders: author, evaluation and justification	

(1) Changes in the thematic framing

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Thematic references in the media coverage on nuclear power	2010 %		2011 %	p
Economy	**73**	↘	**52**	<.001
Energy supply	62	↘	51	<.05
Renewable energies	46	↘	42	ns.
Risk/safety	**36**	↗	**59**	<.001
Environmental pollution	15	↘	7	<.01
Climate compatibility	17	↘	13	ns.
Judicial competences	2	↗	14	<.001
Protest	16	↗	28	<.01
Number of articles/news items (n)	259		243	

(2) Changes in actors' positioning

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Actors	2010		2011	
	Total (n)	Positions against runtime extension	Total (n)	Positions against longer usage
Total (all actors)	701	**31%**	420	**73%**
Governing parties	379	**4%**	187	**75%**
Opposition parties	120	99%	95	93%
Nuclear industry	75	4%	47	9%
Anti-Nuclear Movement	37	100%	39	97%
Economic actors	22	41%	20	65%
Population/citizens	12	83%	8	88%
Other actors	56	50%	24	67%

(2) Changes in actors' argumenation

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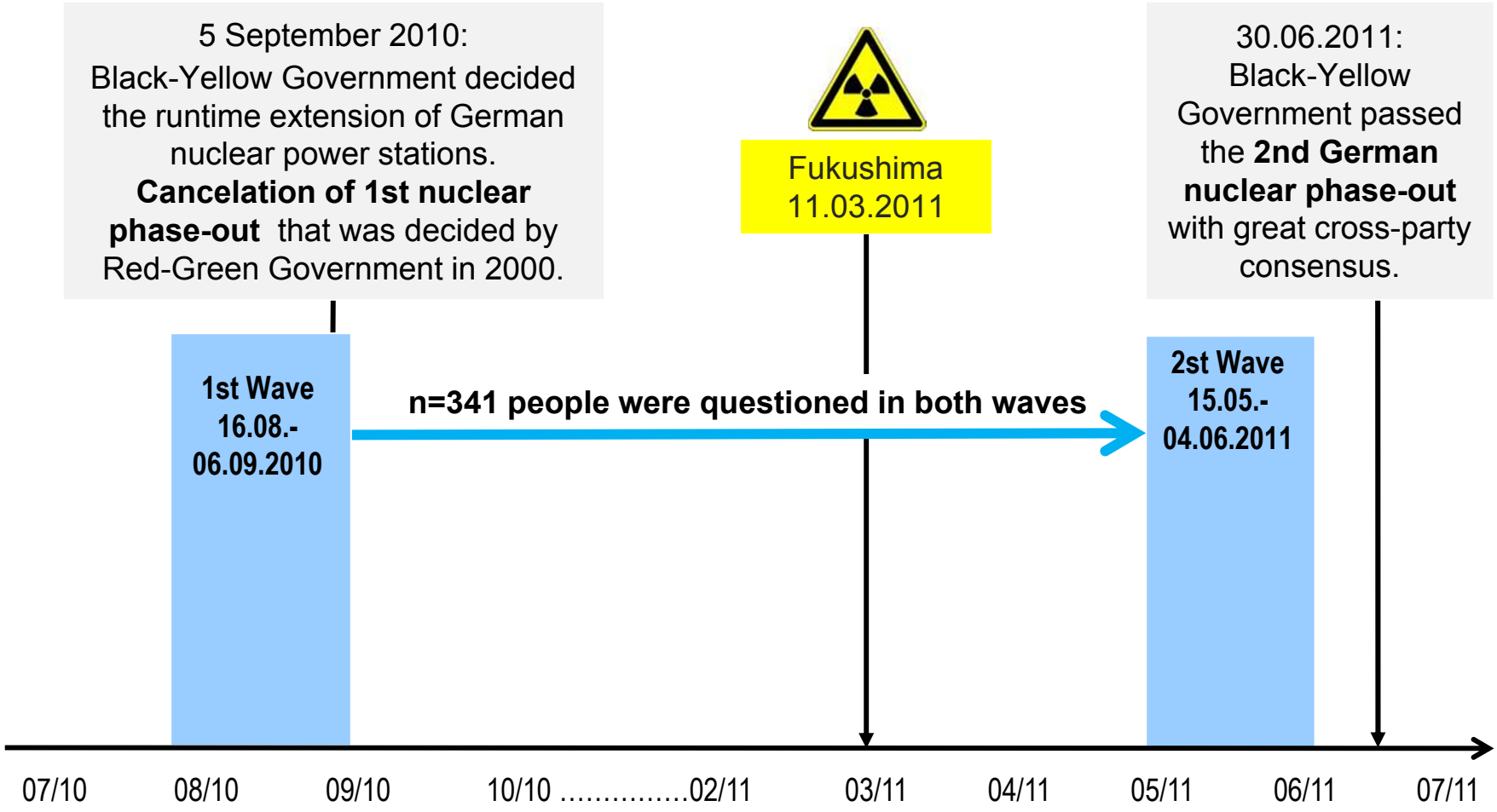
	Governing parties		Opposition parties		Anti-Nuclear Movement		Nuclear industry	
	2010	2011	2010	2011	2010	2011	2010	2011
Arguments (n)	165	53	23	9	15	7	31	15
Economic reasons	66% ↘	19%	17% ↘	11%	53% ↘	-	58% ↗	67%
Secure and guaranteed energy supply	26% ↗	43%	44% ↘	22%	33% ↘	29%	36% ↘	27%
Security and (environmental) risks	8% ↗	38%	39% ↗	67%	13% ↗	71%	6% →	7%

Analysis of changes in the public opinion



Telephone Survey in a panel design

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	2010	2011
Population:	People in private households in Thuringia 18 years and older	
Study period	16.08.2010 bis 06.09.2010	15.05.2011 bis 04.06.2011
Sampling	2-stage random process (Random-Last-Digits & Next-Birthday)	
Panel-Size	341 people (49% women; 51% men) between 19 and 88 years old (average: 52 years) took part 2010 and 2011	
Instrument	Standardized questionnaire with items to 5 different blocks: 1) Attitudes towards nuclear power and renewable energies 2) Political interest, political orientation, energy political attitudes 3) media usage and interpersonal communication behavior 4) Evaluation of media coverage on energy issues 5) Sociodemographics	

Nuclear Power Attitudes: Items and Indexes

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Nuclear Risk-Evaluation

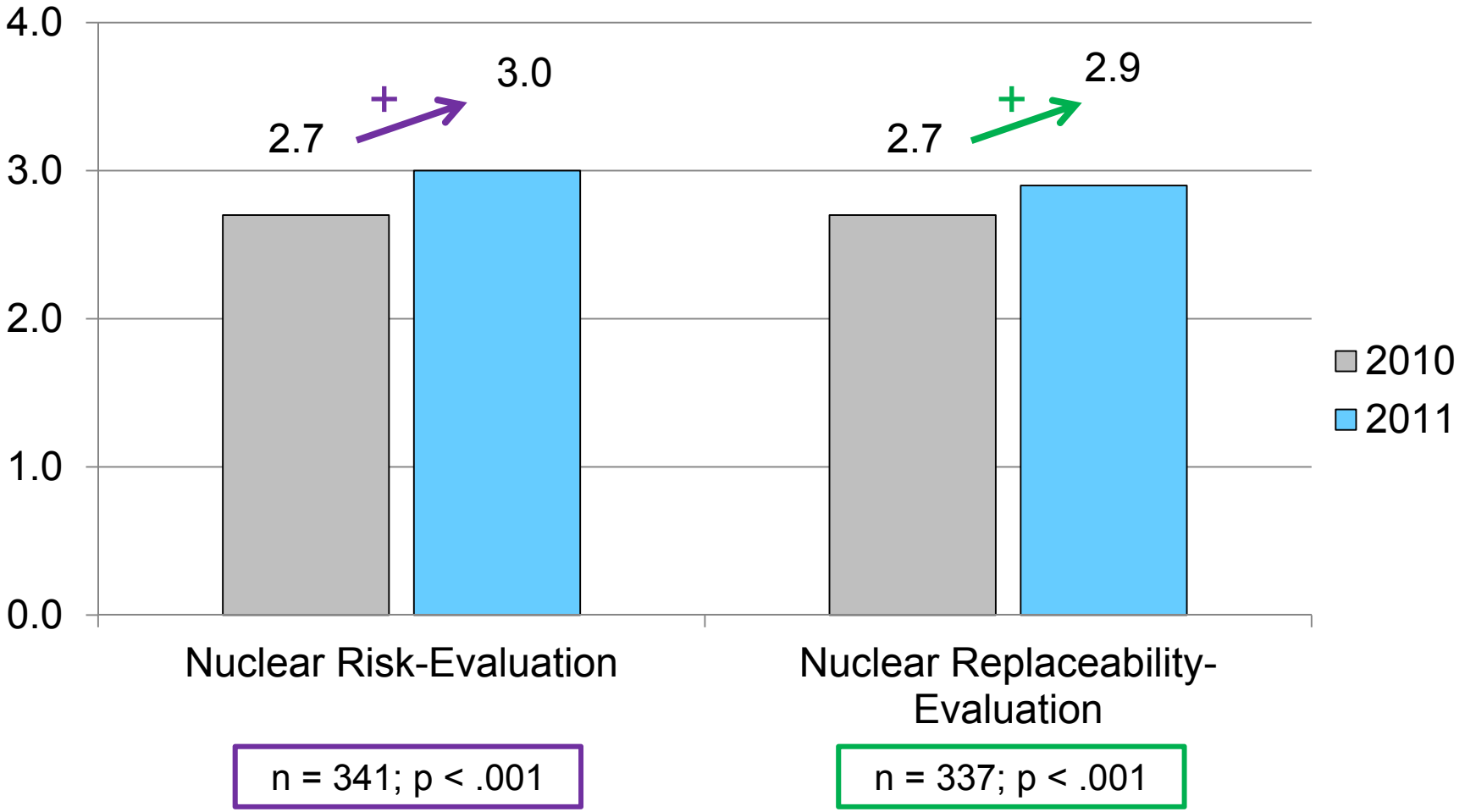
- I am worried about the safety of nuclear power stations.
- I feel threatened by the usage of nuclear power.
- The risk of further nuclear power usage is too high.

Nuclear Replaceability-Evaluation

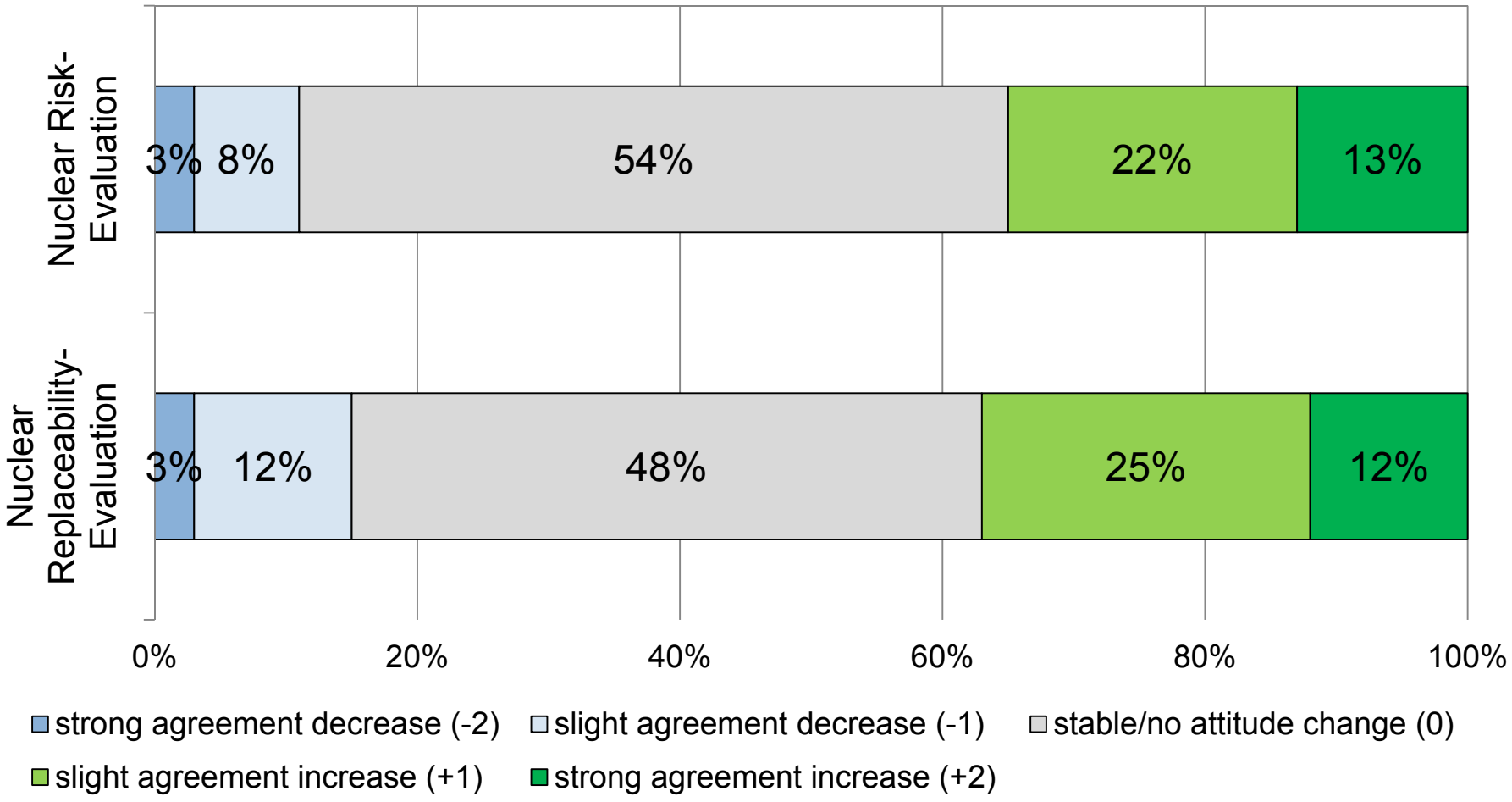
- Without nuclear power the German energy demand will not be covered permanently. (-)
- In the next 20 to 40 years enough energy will be produced by renewable energy resources to disclaim nuclear power completely.
- In the long term renewable energies will be cheaper than nuclear energy.

Measurement on a 4-point scale:
(1) totally disagree; (2) tend to disagree; (3) tend to agree; (4) totally agree

Attitude Change from 2010 to 2011



Analysis of Individual Attitude Change



Explanatory Models for Attitude Changes

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Attitude Change (Δ 2011-2010)	Nuclear Risk-Evaluation (Change Index)	Nuclear Replaceability-Evaluation (Change Index)
	Standardised beta coefficients (β)	
Gender (female)	.13	
Communicating about energy issues (high)	.11	
Media Preference TV vs. Print (Print)		.16
Energy Coverage evaluation: informative (negative)	-.15	
Energy Coverage evaluation: neutral (too dramatic)		-.12
R^2	.05	.04

Note: all coefficients are significant on a level p<.05; non-significant factors that were tested are: age, education, household income, political interest, political left-right orientation, energy-political attitudes, informational media usage behaviour; n=324-336.

Conclusions

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- We found changes in the thematic framing of nuclear power, in particular from economy to risk and security
- We found changes in the positioning of government parties and the argumentation of most important actors groups
- We also found changes in the concern about risks of nuclear power and the belief in replaceability of nuclear energy
- But although the intensive and consonant media coverage was an ideal condition for media effects we were found only a few and rather small media effects

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Thank you for your attention.

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